

CLAIMS

What is claimed is:

1. A system for managing at least one table for a plurality of heterogeneous network processors in a network, the network also including at least one host processor utilizing at least table management application, the system comprising:

5 a plurality of generic application program interfaces (APIs) communicating with the at least one table management application and the plurality of heterogeneous network processors, the plurality of generic APIs for communicating with the at least one table management application in the at least one host processor in a network processor independent manner, the plurality of generic APIs managing the plurality of tables for the 10 plurality of heterogeneous network processors in a network processor specific manner;

15 wherein the plurality of generic APIs allow the at least one table management application to be network processor independent and to manage the plurality of tables for the plurality of heterogeneous network processors in the network processor specific manner.

2. The system of claim 1 wherein the plurality of generic APIs are used by the at least one table management application to govern at least one property of the table and at least one record for the at least one table.

20 3. The system of claim 2 wherein the at least one property of the table includes a state of the tables and wherein a portion of the plurality of APIs is utilized to set the state of the table.

4. The system of claim 3 wherein the state includes an enabled state, a locked state, a disabled state, and a locked state.

5 5. The system of claim 2 wherein at least one property of the table further includes whether the table is linked to at least a second table.

6. The system of claim 2 wherein a portion plurality of generic APIs are to determine whether to add a second record, delete the record, purge the record, and/or age the record.

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7. A computer-readable medium including a program for managing a plurality of tables for a plurality of heterogeneous network processors in a network, the network also including at least one host processor utilizing at least one table management application, the program comprising instructions for:

15 implementing a plurality of generic application program interfaces (APIs) communicating with the at least one table management application and the plurality of heterogeneous network processors, the plurality of generic APIs for communicating with the at least one table management application in the at least one host processor in a network processor independent manner, the plurality of generic APIs managing the plurality of tables for the plurality of heterogeneous network processors in a network processor specific manner;

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wherein the plurality of generic APIs allow the at least one table management application to be network processor independent and to manage the plurality of tables for the plurality of heterogeneous network processors in the network processor specific manner.

5 8. The computer-readable medium of claim 7 wherein the plurality of generic APIs are used by the at least one table management application to govern at least one property of the table and at least one record for the at least one table.

10 9. The computer-readable medium of claim 8 wherein the at least one property of the table includes a state of the tables and wherein a portion of the plurality of APIs is utilized to set the state of the table.

15 10. The computer-readable medium of claim 9 wherein the state includes an enabled state, a locked state, a disabled state, and a locked state.

11. The computer-readable medium of claim 8 wherein at least one property of the table further includes whether the table is linked to at least a second table.

20 12. The computer-readable medium of claim 8 wherein a portion plurality of generic APIs are to determine whether to add a second record, delete the record, purge the record, and/or age the record.

13. A method for managing a plurality of tables for a plurality of heterogeneous network processors in a network, the network also including at least one host processor utilizing at least one table management application, the method comprising:

5 (a) abstracting the plurality of tables for the plurality of heterogeneous network processors;

(b) providing a plurality of generic application program interfaces (APIs) based on the abstraction, the plurality of generic APIs communicating with the at least one table management application and the plurality of heterogeneous network processors, the plurality of generic APIs for communicating with the at least one table management application in the 10 at least one host processor in a network processor independent manner, the plurality of generic APIs managing the plurality of tables for the plurality of heterogeneous network processors in a network processor specific manner;

15 wherein the plurality of generic APIs allow the at least one table management application to be network processor independent and to manage the plurality of tables for the plurality of heterogeneous network processors in the network processor specific manner.

14. The method of claim 13 wherein the plurality of generic APIs are used by the at least one table management application to govern at least one property of the table and at least one record for the at least one table.

20 15. The method of claim 14 wherein the at least one property of the table includes a state of the tables and wherein a portion of the plurality of APIs is utilized to set the state of the table.

16. The method of claim 15 wherein the state includes an enabled state, a locked state, a disabled state, and a locked state.

17. The method of claim 14 wherein at least one property of the table further includes whether the table is linked to at least a second table.

18. The method of claim 14 wherein a portion plurality of generic APIs are to determine whether to add a second record, delete the record, purge the record, and/or age the record.